Change in the syntax and semantics of *be like* quotatives

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1. Introduction

This paper focuses on change in the syntax and event semantics of *be like* quotative constructions, as illustrated in (1).

(1) Aaron was like "Ok, fine."
   a. 'Aaron thought/felt like saying "Ok, fine."'
   b. 'Aaron said "Ok, fine."'

Be like as an introducer of quoted speech is innovative in many contemporary varieties of English. Recent corpus-based work on *be like* has suggested that as it has continued to spread, it has undergone syntactic and semantic change: *be like* predicates, originally used exclusively to describe non-speech states of individuals as in (1a), have taken on an additional guise as descriptors of saying events as in (1b) (Tagliamonte & Hudson 1999, Buchstaller 2004). This paper reports on two judgement experiments with speakers of American English intended to explore further claims of syntactic and semantic change in *be like* quotatives. In particular, we make two main claims about change in these forms. First, our experimental results suggest that the direct speech and reported thought readings of *be like* are diffusing into American English at a similar rate. From the perspective of Kroch's (1989) seminal constant rate proposal, this result is consistent with a view of these two guises of *be like* as different environments in a single abstract process of change. In particular, we relate the ambiguity between direct speech and reported thought *be like* in (1) to the availability of copula *be* in active contexts as in (2) and (3)(Partee 1977, Dowty 1979, Parsons 1990, Rothstein 1999).

(2) John forced him to be quiet.
(3) Jane is being polite.

We extend Rothstein's (1999) proposal for adjectival predicates under copula *be* to the variation between speech and non-speech interpretations of *be like* quotatives in (1). In particular, we propose that copula *be* always selects for an adjectival (stative) argument, and that the availability of eventive readings as in (1b), (2) and (3) is attributable to a semantic coercion mechanism[i], akin to operations that make count readings out of mass nouns in the nominal domain.

A second goal of this paper is to account for some syntactic properties of *be like* that distinguish it from other verbs of saying, including its opacity to *wh*-extraction and quote-raising (Flagg 2007, cf. Collins 1997), and its unavailability in reported speech contexts. Developing Kayne's (2007 fn. 9) brief discussion of *be like* quotatives, we propose that a range of these properties are accounted for by the presence of a null SOMETHING under *be*. This null indefinite takes a *like*-headed PP which introduces the quoted material. This approach is shown to correctly express a range of properties of *be like* quotatitives in English, and may extend in part to kindred manner deictic quotatives cross-linguistically. In describing the relationship between tense and agreement morphology, discourse-related (A-bar) movement and event semantic interpretation as cues to the phonetically null lexical material involved to this change, our analysis contributes to theme of this volume, focussing on the interaction of these phenomena in syntactic change.

The paper is organised as follows. In section two, we report on an experiment to measure the correlation between speaker age and acceptability of eventive and stative interpretations of *be like*. Section three describes a second experiment that examines main verb properties of *be like*. Section four develops the syntactic and semantic proposals and considers

the degree to which the analysis may extend to other manner deictic quotatives cross-linguistically.

2. Experiment 1: Direct speech and non-speech interpretations of *be like* quotatives

Be like as an introducer of quotes was first described in diachronic and sociolinguistic literature on American English in the 1980's and since has been reported in many other varieties of English worldwide (Blyth, Recktenwald and Wang 1990, Macaulay 2001, Cukor-Avila 2002, Buchstaller & D'Arcy 2009, Bakht 2010). Early work on *be like* described it not as an introducer of direct speech, but rather exclusively as an introducer of reported thought (Butters 1982). Much subsequent corpus-based work on *be like* however has reported that quotes introduced by *be like* can describe not just states of individuals as in (1a), but also saying eventualities as in (1b). A disadvantage of usage corpora for analysing semantic variation of this kind is that the intended reading can be difficult to discern from the context. The following discussion therefore describes an experiment intended to examine cross-speaker differences in the availability of speech and non-speech readings of *be like* using a different technique—a controlled judgement experiment that compares acceptability scores across conditions biasing these different readings.

2.1 Method.

Subjects. The participants were 121 self-described native speakers of American English aged 18-73 (M=31.3, SD=11.6)—71 women and 50 men. All had at least some university education. Participants were recruited online through the contacts of the researchers and were not paid for their participation.

Materials. The experiment compares scores for *be like* and *say* sentences in six environments. A first, baseline context was created with no stativity/eventivity bias, as in (1). Four additional contexts—progressives, imperatives, *force…to* complements, and pseudoclefts with *do*—were used as standard diagnostics of event readings: All are contexts in which eventive predicates are fine, but true states are poor (Dowty 1979). We illustrate this contrast in (4)-(7), which compare stative *have $100* with eventive *spend $100* in each environment.

(4) She was *having $100/spending $100. (progressives)
(5) Just *have $100/spend $100. (imperatives)
(6) Tim forced him to *have $100/spend $100. (*force…to*)
(7) What she needs to do is *have $100/spend $100. (*do* pseudoclefts)

In the following experiment, we use these environments to compare acceptability of eventive, direct-speech readings of *be like* and *say,* as illustrated in (8)-(11).

(8) She was being like/saying, "They're coming tomorrow at 11:00" (progressives)
(9) Just be like/say, "They won't ever do it." (imperatives)
(10) Tim forced him to say/be like, "Fine, I'll do it next week." (*force…to*)
(11) What she needs to do is say/be like, "John already quit." (*do* pseudoclefts)

The final environment biased non-speech *be like* readings using *for* adverbials. As illustrated in (12), temporal *for* phrases are fine with atelic predicates in simple tenses but poor with eventives (Dowty 1979).

(12) For an hour, Mark had $100/*spent $100. (*for* adverbials)

We use such contexts to diagnose the availability of stative, non-speech interpretations of *be like* and *say* quotative predicates, as in (13).

(13) For an hour, Mark was like/said, "Let's go to McDonald's" (*for* adverbials)

Two lexicalisations were created for each environment, each assigned either to a *be like* or *say* condition yielding two test sets. Each participant therefore saw each condition once. Subjects were randomly assigned to test sets, and a unique random order of the 12 test sentences and 18 fillers was created for each subject.

Procedure. The data were gathered through a self-paced online magnitude estimation procedure using WebExp2 software in the summer of 2009. In syntactic magnitude estimation experiments, subjects judge stimulus sentences not on an abstract n-point scale but rather in relation to a non-zero score arbitrarily assigned to a benchmark ("modulus") sentence (Bard et al 1996). If the stimulus sentences is judged to be twice as acceptable as the benchmark sentence, the participants gives it twice the benchmark score; if it is half as acceptable, half the benchmark score, and so on. In the present experiment, the benchmark sentence used was that in (14), which native speakers of English typically find to be of intermediate acceptability.

(14) I wouldn't give to the boy the difficult puzzle.

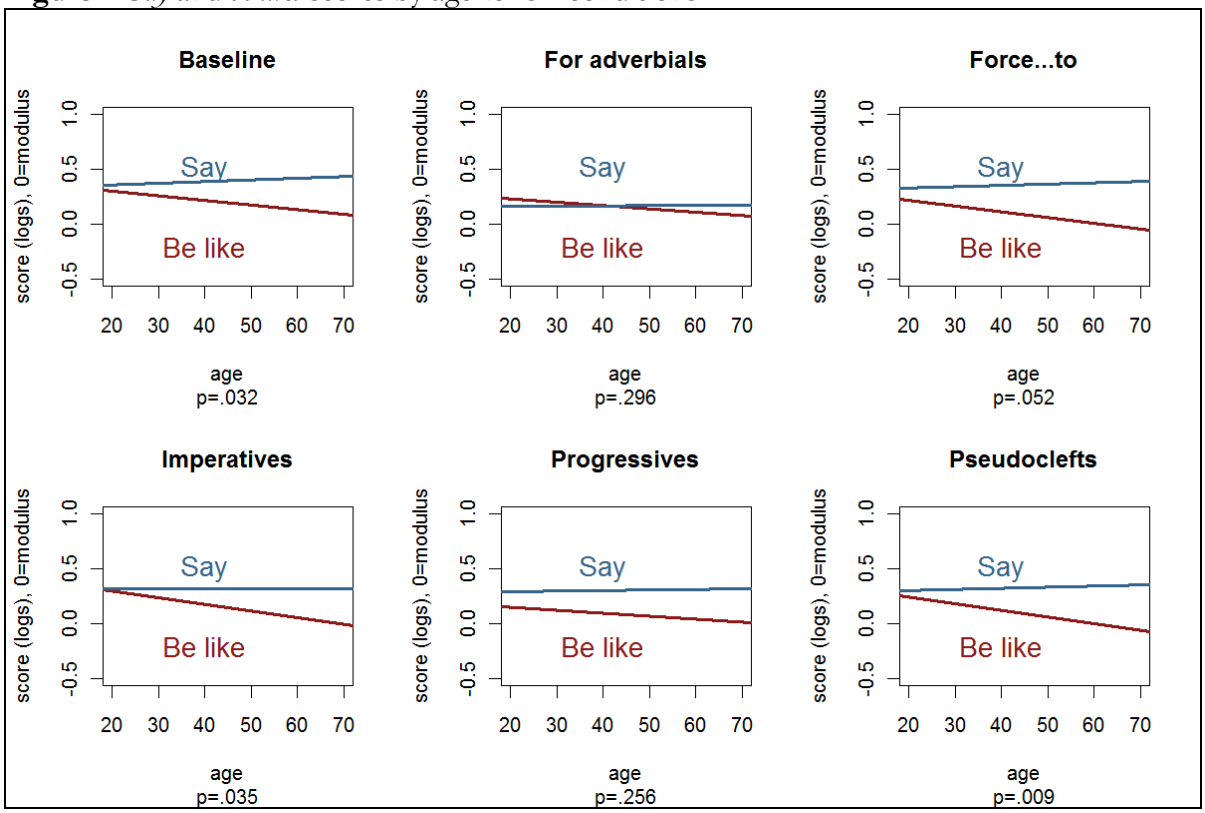
After giving consent to participate, subjects were asked to provide some background information, including age, sex, highest level of education completed and hometown. Subjects were then introduced to the magnitude estimation procedure, and then given two sets of slides providing practice in applying this technique. In the first set, subjects used magnitude estimation to measure lengths of lines; the second set provided sample sentences to judge. The experimental phase followed, which subjects typically completed in between five and ten minutes.

Following Bard et al's (1996) procedure, raw scores were normalised by dividing them by the benchmark score. The decadic logarithm of these scores was then taken in order to make data normally distributed and suitable for parametric tests. In the following results, we report these log-transformed values.

2.2. Results.

To examine the effect of speaker age on acceptability scores, we fit mixed-effect linear models for each condition using the lme4 package for R (Bates and Maechler 2010). The dependent variables were log-transformed values for each condition, with age and verb as fixed effects and subject and item as random effects. P-values were simulated by Markov chain Monte Carlo (MCMC) sampling (10,000 samples) using the LanguageR package for R (Baayen 2006, 2010). To examine cross-generational difference in acceptance of *be like* in each of these environments, we focus not on the effect of age but rather the age*verb (*be like* vs. *say*) interaction. We choose this measure in order to account for a possible age effect in preferences toward direct speech vs. reported speech. The results are summarized in Figure 1, which plots *say* and *be like* scores by subject age for each condition and reports a p-value for the verb*age interaction variable.

Figure 1: *Say* and *be like* scores by age for six conditions.



The plots in Figure 1 show that while the *say-be like* gap increases with age across these conditions, the age*verb interaction reaches significance at α=.05 only for three environments: the baseline context; pseudoclefts and imperatives; the interaction for *force...to* complements is suggestive at p=.052. For *for*-adverbials there is no interaction between age and verb, and in fact no main effect for verb. These judgement data therefore align only partially with corpus data suggesting diffusion of be like in direct speech and non-speech contexts. The absence of more consistent age effects in these data may be partially attributable to the fact that our sample is relatively youthful, with a mean age of 31.1. These age effects are in any case orthogonal to the main focus of this study, and we set them aside in the following discussion.

More directly relevant to the focus of this study is the robust acceptability of *be like* across these conditions among younger speakers. Figure 1 shows that for speakers around 25 or younger, acceptability of *be like* is close to that for *say*. We examine this further using mixed effects models for each of the above six contexts, with data from under-26-year-olds in the sample (n=50). As in the models just described, the dependent variables were the log-transformed acceptability scores, with fixed effect verb and random effects item and subject. The analyses revealed no significant main effects for verb in any of the six conditions. These results are summarized in Figure 2 which shows MCMC-estimated confidence intervals for *say* and *be like* sentences; MCMC-estimated p-values for the verb factor appear below the error bars for each condition.

Figure 2: Partial effects and 95% HPD intervals for under-26-year-olds' scores in six conditions

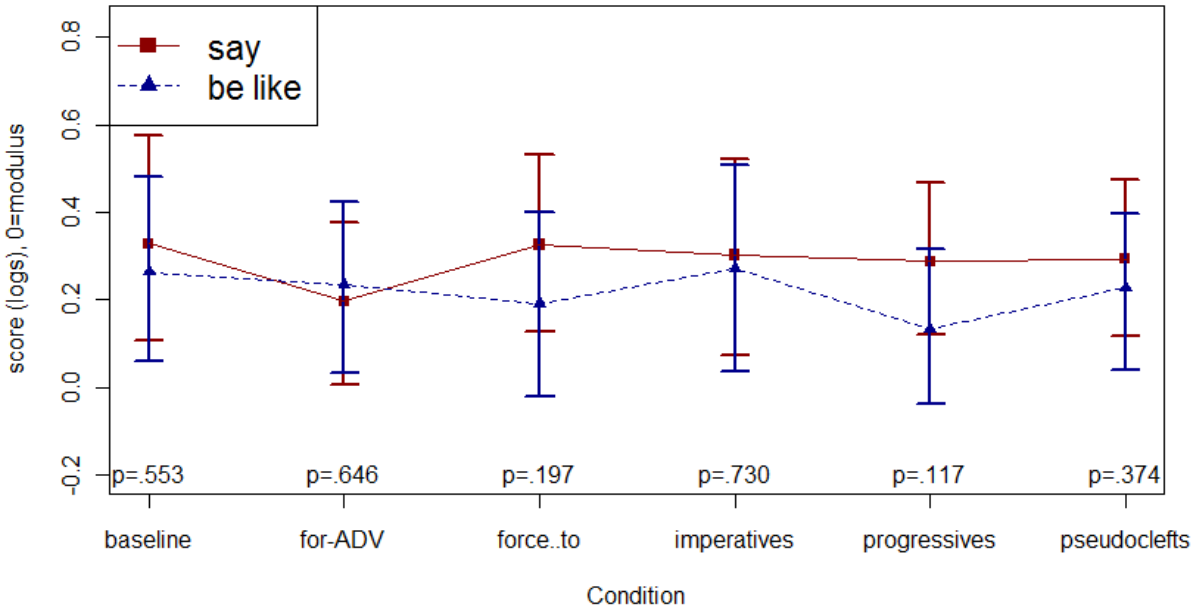


Figure 2 shows no significant main effect for verb for any of the six conditions, indicating that *be like* in these environments is on a par with counterpart *say* sentences for younger speakers.

A final important result concerns the similarity in the age slopes for *be like* in the atelic-biased *for* condition and eventive-biased conditions in Figure 1. Linear mixed effect models revealed no significant interaction between age and condition for any of the four comparisons.[ii] These findings are in keeping with corpus results which generally converge in suggesting a constancy in the effect of the speech/non-speech contrast in this process of change (Cukor-Avila 2001, Tagliamonte & D'Arcy 2007, Buchstaller & D'Arcy 2009).

The parallel diffusion of the two interpretations of *be like* in Figure 1 is consistent with an approach that treats their diffusion as a single abstract process of change. Much previous quantitative work on historical corpora has shown that for any single abstract process of syntactic change, contextual effects are typically constant over time—a phenomenon known as the *constant rate effect* (Kroch 1989, 1994, Pintzuk 1991, Santorini 1992, Freuhwald et al 2009). Kroch (1989) attributes this constancy to individuals' language-independent faculty for tracking frequencies of experienced events. As learners acquire and increment new forms, they will learn from input sources the relative propensities of use of variants in different contexts, with the consequence that contextual effects will be propagated across generations of speakers, all other things being equal. Occasionally, linguistic factors can come to interact with social factors in new ways which may have the effect of changing the effects across time, but this is the exception rather than the rule, to judge from the published literature (Kroch 1989). From the perspective of this literature, the present experimental results are therefore consistent with a view of the diffusion these two guises of *be like* as different contexts in a single abstract process of grammatical change. We spell out the syntactic reanalysis in section 4 below.

To summarise, the experimental results so far support two main conclusions about the syntax and semantics of *be like* quotatives. First, younger speakers in the sample accept *be like* readily in environments biasing both eventive direct speech and stative non-speech interpretations. For all six conditions, younger subjects accept *be like* on a par with *say*. As eventive, direct-speech *be like* has entered the grammar, it therefore appears not to have displaced the stative variant of *be like*; rather both interpretations are available for the younger speakers who use and accept *be like* to the greatest extent. Second, the data support corpus evidence suggesting that stative and eventive guises of *be like* are diffusing at the same rate.

These facts are consistent with a view of these two variants as involved in a single underlying change in the grammar.

3. Experiment 2: *Be like* and verb movement

The data in the previous section support evidence from corpus studies indicating that for many younger speakers of English, a speech event interpretation of *be like* quotatives is readily available. In this section, we consider a second set of experimental data intended to test one formal approach to these facts.

In many contemporary approaches to agentivity, change-of-state meaning is associated with a functional head merged low in the functional sequence of the clause, above the main verb (Chomsky 1995, Kratzer 1996). From the perspective of these approaches, one possible account of the variation between eventive and stative is in terms of their categorial status and merged position in the functional sequence. The *be* in stative *be like* contexts, on this account, will be a garden variety copula, merged in a designated copula projection or as a modal or tense head (Schütze 2004) as in (15).

(15) [TP *be* [PrtP *like* [QUOTE]]]]

By contrast, *be* in eventive contexts will be merged as a main verb low in the functional sequence as in (16).

(16) [TP [VP $be_{[[SAY]]}$ [PrtP *like* [QUOTE]]]]

This approach predicts that the *be* of *be like* in eventive contexts will be un-auxiliary-like on standard diagnostics. One such test involves subject auxiliary inversion (SAI), which in contemporary English is restricted to modals and auxiliaries. As illustrated in (17), inversion of the subject with the main verb *ate* is bad; *do-support* is required instead, as in (18).

(17) *Ate you a cucumber?
(18) Did you eat a cucumber?

If the *be* of *be like* is a main verb of the familiar sort, then *ceteris paribus*, we expect *be* to be poor in SAI on eventive interpretations on a par with other main verbs. In contrast, if *be* in stative contexts is an auxiliary we expect it to be acceptable.

A second standard diagnostic of main-verb-hood concerns placement of VP adverbs like *quickly*, which never appear to the left of modals/auxiliaries, but can appear to their right (Jackendoff 1972).

(19) *George quickly was finishing his dinner. (*quickly*-Aux)
(20) George was quickly finishing his dinner. (Aux-*quickly*)

Main verbs, on the other hand, happily take *quickly*-type adverbs to their left, but not to their right, as shown in (21) and (22).

(21) Jeremy quickly ate his soup. (*quickly*-V)
(22) *Jeremy ate quickly the soup (V-*quickly*)

In the following sections we describe an experiment intended to test these predictions.

3.1 Method

Subjects. Participants were 50 volunteer undergraduates and staff at CUNY and NYU, 37 women and 13 men, aged 18-39 (M=20.3, SD=3.19). All were self-described speakers of American English.

Materials. The experiment consisted of two subdesigns, one focusing on SAI and the second focusing on adverb placement. The SAI subdesign crossed two factors, each with two levels: verb movement, with levels inversion (a *yes/no* question) and non-inversion (a declarative); and quotative verb, with levels *say* and *be like*. The *say* sentences are included as a control condition: in order to test whether *be like* is degraded in inversion vs. non-inversion contexts, we compare the effect of this contrast with that for *say* as a quotative verb with more familiar main-verb syntax. To bias a speech event interpretation for *be like*, each test sentence included an adverbial felicitous with a direct speech reading but not non-speech/thought readings, e.g. *twice in a row*, *in five seconds flat* etc. This design is summarized in table 1 below.

Table 1: SAI subdesign design

	SAI	¬ SAI
Say	Did she say, "shut up" twice in a row?	She said, "shut up" twice in a row.
Be like	Was she like, "shut up" twice in a row?	She was like, "shut up" twice in a row.

Four lexicalizations were created for each cell and assigned to one of four test groups by latin square. Each subject therefore judged each condition once.

The adverb placement subdesign was similar in design, crossing two factors: verb-adverb order with levels V-adverb and adverb-V; and quotative verb with levels *say* and *be like*. This design is illustrated in Table 2 below.

Table 2: Adverb placement subdesign design

	V-Quickly	Quickly-V
Say	She said quickly, "shut up" twice in a row.	She quickly said, "shut up" twice in a row.
Be like	She was quickly like, "shut up" twice in a row.	She quickly was like, "shut up" twice in a row.

Four lexicalizations were created for each cell and distributed them into test sets by latin square. Each subject therefore judged each condition once. These sentences together with the four experimental sentences from the SAI subdesign were pseudo-randomized together with 12 fillers.

Procedure. The testing procedure was similar to that for experiment 1. The data were gathered through a self-paced online magnitude estimation procedure using WebExp2 in the autumn of 2010. The benchmark sentence used was (14), the same used in experiment 1. After giving consent to participate, subjects were asked to provide some background information, including age, sex, highest level of education completed and hometown. Subjects were then introduced to the magnitude estimation procedure, and then given two sets of slides providing practice in applying this technique. In the first set, subjects used magnitude estimation to measure lengths of lines; the second set provided sample sentences to judge. The experimental phase followed, which subjects typically completed in between five and ten minutes. As with the data from section 2, we report normalized, log-transformed values following Bard et al's (1996) procedure.

3.2 Results

Subject Aux inversion. The effects of verb and verb movement interaction were measured by fitting mixed effects linear models, with log-transformed acceptability scores as the dependent variable, verb and verb movement as fixed effects and item and subject as random

effects. P-values were again simulated using MCMC sampling (10,000 samples) using the langaugeR package.

The analysis revealed no significant main effect for verb (p=.085) or verb movement (p=.200), and no significant interaction between these factors (p=.364). We illustrate these results in Figure 3, which plots the partial effects of the above model with 95% highest posterior density credible intervals for our four conditions: *be like* and *say* sentences in (SAI) yes/no questions and (non-SAI) declaratives.

Figure 3: Partial effects and 95% HPD intervals for *be like* and *say* in SAI and non-SAI contexts

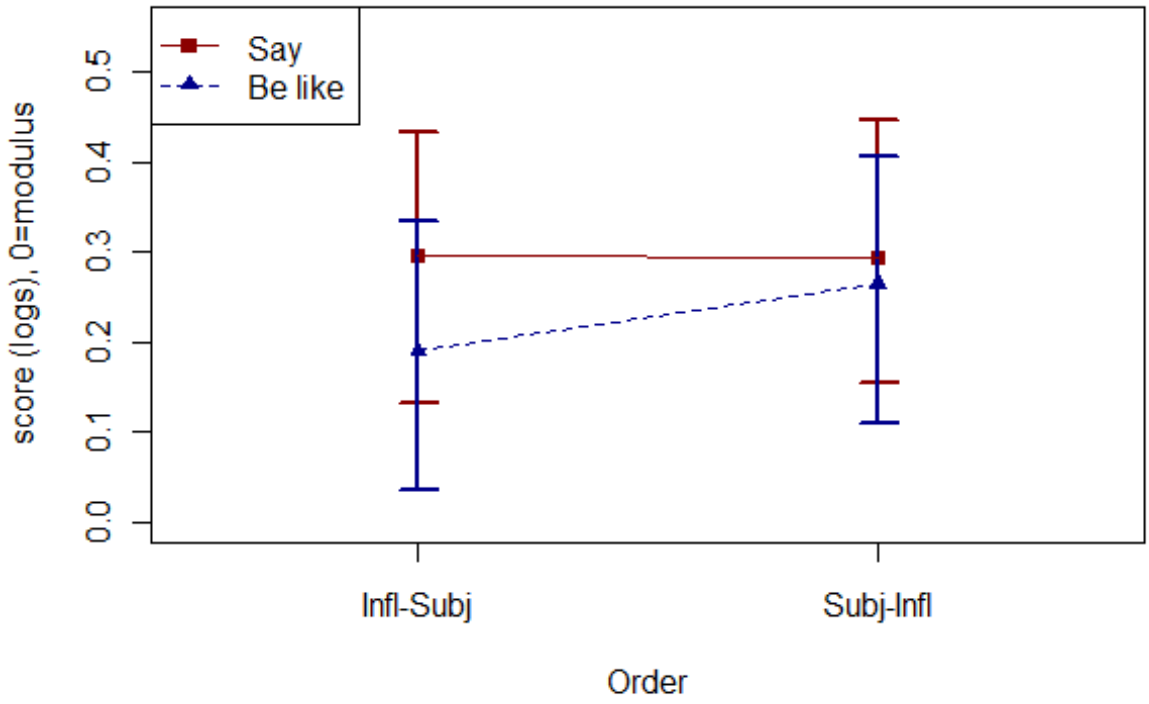
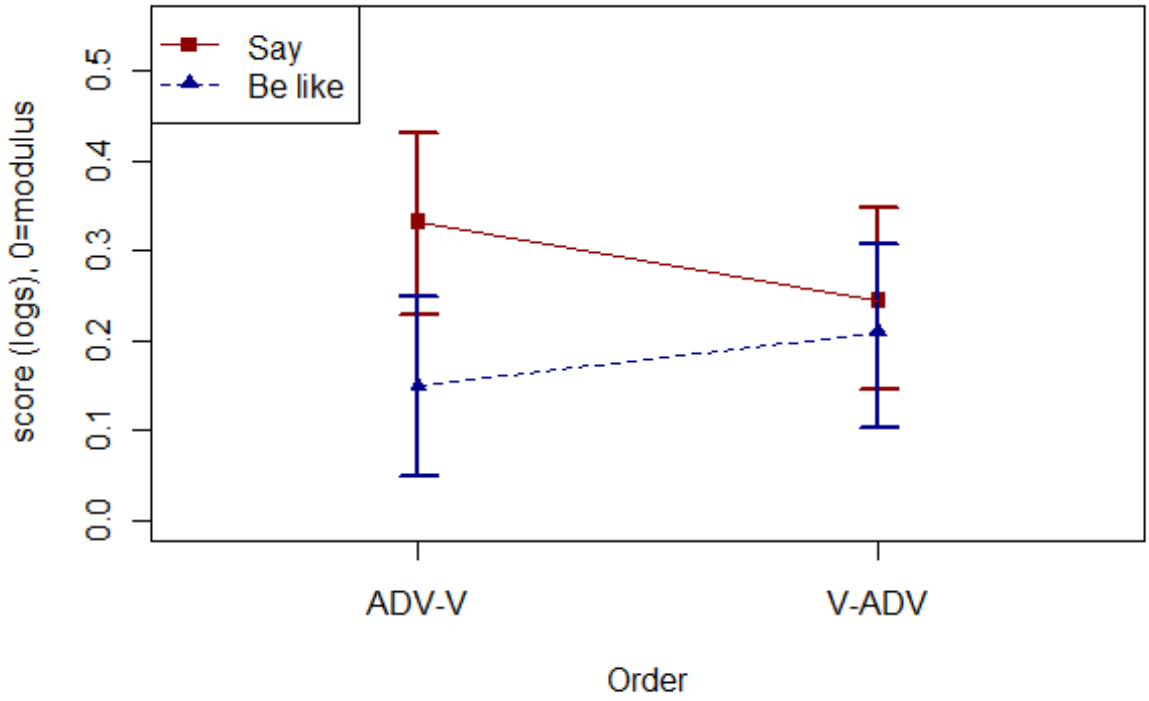


Figure 3 shows that aggregate scores for *be like* and *say* in non-SAI contexts are near identical. Scores for *be like* are somewhat degraded on the SAI condition, but this difference is not significant at α=.05. These results, therefore, provide no support for a difference in behaviour between *be like* and *say* in terms of SAI. The fact that movement of inflected *be* to the left periphery is on a par with that for *do*, in the *say* condition suggests that for this sample the *be* of *be like* in speech event contexts is not particularly main-verb-like in SAI-triggering contexts.

Adverb placement. A mixed-effect linear model revealed no significant main effect for verb-adverb order (p=.245), but a significant main effect for verb (p=.001), and a significant interaction for verb and adverb-verb order (p=.047). These results are illustrated in Figure 4, below, which show partial effects for the above model with 95% highest posterior density credible intervals.

Figure 4: Partial effects and 95% HPD intervals for *be like* and *say* in Adv-V and V-Adv orders



The interaction shown in Figure 4 is what we expect if the *be* of *be like*, unlike *say* is not a lexical verb but rather sits higher in the clause. These results, along with the SAI data summarized in Figure 2, therefore, suggest little support for a "main verb" *be* approach. In the discussion below, we develop an approach to the syntax/semantics of *be like* that takes *be* in such constructions to be a garden variety copula.

4. The syntax and semantics of *be like*.

In the previous sections, we have seen experimental evidence for the existence of both eventive and stative readings for *be like*. We have also seen evidence that, perhaps surprisingly, *be* acts as a copula under both readings. A natural starting point for an analysis, then, is to relate quotative *be like* to other cases where copula *be* can display eventive readings.

It is a well-established fact that copula *be*, while typically characterized as a stative verb, can take eventive readings in certain contexts. For example:

(23) John is being silly.

(23) features two occurrences of *be*. The first is a banal auxiliary *be* that precedes V+*-ing* forms in progressives. The second, which appears in progressive form, is unusual in that while it selects an adjective, the overall meaning imparted is not stative. Parsons (1990) refers to this as the "*be* of activity". Note that while the most common context for identifying the *be* of activity is the progressive, it can also appear in other contexts such as (24) below, which is ambiguous between a stative reading where Mary asked John to adopt a new characteristic, and an eventive reading where she requested that he act in a silly manner:

(24) Mary asked John to be silly.

Early accounts of the *be* of activity (Partee 1977, Dowty 1979, Parsons 1990) proposed that it is a case of lexical ambiguity, wherein English has a lexical item *be* that means something like *act*. However, Rothstein (1999) argues that this account is untenable, and proposes instead an account that argues that there is a single *be* in English. The function of *be,* in Rothstein's view, is

to take the meaning of an adjective phrase, which is a property of states, and repackage it into a Davidsonian eventuality argument. In most contexts, this argument itself will be stative, so the purpose of the repackaging will be to convert a general stative property to a particular one; in (25) below, it converts the property of silliness to John's particular silliness:

(25) John is silly.

However, when there are other cues to the nature of the eventuality – for example, a progressive aspect as in (23) above or an embedded *be* as in (24), the process can result in an eventive reading for the adjective phrase[iii]. While there are important differences between *be like* and the data discussed in the majority of the *be* of activity literature – the main one being that the *like*-quotative argument of *be* is not an adjective phrase – Rothstein's proposal provides an important component to understanding the change involved in the meaning of *be like*, as it shows that a single *be* can generate both eventive and stative readings from the same argument. Below we discuss the emergence of these meanings.

4.1 Kayne's (2007) null indefinite approach *be like* quotatives

Our syntax for *be like* quotatives will need to accommodate the semantic proposal just presented along with five additional properties that distinguish it from other English verbs of saying. First, *be like* differs from *say*-type verbs in that cannot introduce indirect speech, as shown in (26) and (27).

(26) *John was like that he was hungry.
(27) John said that he was hungry.

Second, as noted by Flagg (2007), *be like* differs from *say* in that when a quote introduced by *be like* is questioned, the question word cannot extract. This difference is illustrated in (28)-(30). Example (28), with *what* in situ, is fine on both a direct speech interpretation and on an interpretation where the questioner is asking about some salient state of Aaron. In (29), on the other hand, *what* extracts and the result is poor on a quotative interpretation but not a stative interpretation. *Say* in quotative contexts shows no such opacity to *wh*-extraction, as shown in (30).

(28) Aaron was like what?
  a. OK 'What did Aaron say?'
  b. OK 'What was Aaron's state?'
(29) What was Aaron like?
  a. * 'What did Aaron say?'
  b. OK: 'What was Aaron's state?'
(30) What did Aaron say?

Third, unlike other verbs of saying, *be like* does not allow for quotative raising (Flagg 2007). Examples (31) and (32) show that quotes can precede *say*, with or without an inverted subject (Collins 1997, Suñer 2000).

(31) "Shut up," Aaron said.
(32) "Shut up," said Aaron.

Be like quotatives on the other hand never allow raising with or without inversion, as shown in (33) and (34).

(33) *"Shut up," Aaron was like.
(34) *"Shut up," was like Aaron.

Fourth, while stative *be like* meaning survives under negation, eventive readings do not. In (35), *be like* happily co-occurs with negation, but requires a stative, thought/feeling interpretation. On a direct speech interpretation, forced by the inclusion of *loudly* as in (36), the sentence is poor.

(35) Aaron wasn't like "shut up."
(36)?? Aaron wasn't like "shut up" loudly.

Fifth and finally, *be like* quotatives on a direct speech interpretation are most naturally interpreted not as reporting a verbatim quote, but rather a close paraphrase (Buchstaller 2004:111). In particular, (37 a,b) show that quotatives with *say* are felicitously preceded with phrases like *word for word* and *exactly* which force verbatim interpretations. The examples in (38) show that counterpart sentences with *be like* are odd.

(37) a. Word for word, she said, "I-didn't-plagiarize."
b. She said exactly, "I promise to be there."
(38) a. # Word for word, she was like, "I-didn't-plagiarize."
b. #She was exactly like, "I promise to be there."

This "mere paraphrase" component of *be like* quotatives does not appear to be asserted, but rather shows properties of being an implicature[iv]. These include the fact that it can be explicitly cancelled by later discourse, at which point the verbatim interpretation arises, as seen in (39), as well as the fact that it is susceptible to *in fact* cancellation (40).

(39)A: She was like, "I-didn't-plagiarize."
B: Word for word?
A: Yes.
(40) She was like "I like bananas" – in fact, that was exactly what she said.

Ignoring the "mere paraphrase" meaning which we return to shortly, we take a view in the spirit of Davidson (1968), wherein the quote has to be the same as the speech event, where "same-saying" allows for contextually agreed upon vectors of variation (for example, if the subject of the sentence spoke with a lisp, the person quoting them does not have to replicate this lisp to count as saying the same). We also adapt Davidson's proposal in assuming that the quote is introduced by a demonstrative THAT. (See also Partee (1973), Munro (1982) and Etxepare (2010) for likeminded proposals.) In most dialects, this demontratives is null, however in a few other varieties, including Glasgow English, it is optionally overt as in (41).

(41) And they were like that "How're you doing, Mary." Glasgow English (Macaulay 2001:13)

We take the *like* of *be like* to be a garden variety manner preposition as illustrated in (42). On these assumptions, a sentence like (1) will have, as a first approximation, the representation shown in (42).

(42) $[_{TP}$ Aaron $[_{T'}$ was $[_{PP}$ like $[_{DP}$ THAT [QUOTE]]]]]

On this approach, the fact that *be like* is unavailable with reported speech is therefore explained as a consequence of the fact that it introduces mimesis. Something more, however, is

required to account for additional properties of *be like* in its direct speech guise, namely (i) its opacity to extraction, (ii) its incompatibility with clausal negation, and (iii) the "mere paraphrase" implicature. Developing Kayne's (2007 fn. 9) brief discussion of *be like* quotatives, we propose that this something else is a null SOMETHING. Specifically, Kayne proposes that *be like* quotatives involve a null SOMETHING merged as the complement of a null GOING verb, which provides the eventive interpretation. On Kayne's approach, a sentence like (43) for example, will have the structure given in (44) (both from Kayne 2007, fn.9).

(43) She was like, "He's gotta be kidding."
(44) She was GOING SOMETHING like, "He's gotta be kidding."

We follow Kayne in assuming that *be like* predicates involve a null SOMETHING, for reasons to be spelled out shortly. We depart from Kayne, however, in not assuming a null GO main verb. One reason for this has to do with temporal semantic differences between *be like* quotatives and counterpart sentences with an overt GO in the progressive. In particular, (45) and (46) show that *be like* quotatives do not interact with temporal adverbial clauses in the expected way, if they contain a verb in the progressive.

(45) Amy was like, "He's gotta be kidding," when I walked in.
(46) Amy was GOING SOMETHING like, "He's gotta be kidding," when I walked in.

In (45), Amy is understood to begin her quote after the speaker walked in. In (46), with an overt GOING, the speaker is understood to have walked in when Amy is midway through the quote. The interpretation of (45) is unexplained if sentences like (43) contain a null GO—or any other quotative verb—in the progressive.

A second reason for eschewing Kayne's null GO proposal is theory internal. Kayne's null GO is incompatible with a unified approach to *be like* and other cases of "agentive *be"* as discussed above in that there is no apparent motivation for supposing a null GO in other agentive *be* contexts such as (47).

(47) (Rothstein 1999: 356)
a. Jane is polite.
b. Jane is being polite.

Abandoning Kayne's null GO proposal, and assuming that a more general phenomenon is responsible for the agentive interpretation of *be like* quotatives accommodates a unified synchronic syntax of agentive *be* and eventive *be like* as discussed above. It also suggests a fairly simple process of syntactic change: once quotes came to be available as descriptors of states, eventive *be like* interpretations fall out, with the additional enrichment of a null SOMETHING.

Our proposals for eventive and stative *be like* are illustrated in (48) and (49), which give structures for a sentence like (1) on reported thought and direct speech interpretations respectively.

(1) Aaron was like "Ok, fine."
a. 'Aaron thought/felt like saying "Ok, fine.'"
b. 'Aaron said "Ok, fine.'"
(48) ***Stative (reported thought) interpretation***
$[_{TP}$ Aaron $[_{T'}$ was $[_{PP}$ like $[_{DP}$ THAT [QUOTE]]]]]
(49) ***Eventive (direct speech) interpretation***
$[_{TP}$ She $[_{T'}$ was $[_{DP}$ SOMETHING $[_{PP}$ like $[_{DP}$ THAT [QUOTE]]]]]

On this approach, the unavailability of *wh*-extraction with direct speech readings will be reminiscent of restrictions on *wh*-raising out of *some*-quantified DPs, as in (50).

(50) ?? Who did you see some picture of <who>?

The fact that *be like* is transparent to *wh*-extraction on a stative interpretation is furthermore explained since this context will lack a null SOMETHING-headed DP layer.

Similarly, the contrast between eventive and stative readings with respect to negation is explained by the fact that *some* is a positive polarity item, i.e. cannot scope below negation, as in (51) (Szabolcsi 2004). Again, because the null SOMETHING is present only in eventive contexts, negation is fine with stative, non-speech interpretations.

(51) I didn't see some boy. *¬>∃ 'I didn't see any boy.'

Finally, the "mere paraphrase" implicature of *be like* quotatives follows straightforwardly from syntax in (49), which asserts that the speaker said *something like* the given quote. Again, the statement in (1) is true in contexts in which the quote is verbatim, but pragmatically odd, particularly if the faithfulness of the quote is contextually salient. On this approach, then, quotative *be like* sentences implicate a mere paraphrase understanding of the reported quote in the same way that (52) implicates that cougars are merely similar to mountain lions.

(52) A cougar is something like a mountain lion.

The incompatibility of *exactly* and *word for word* with *be like* quotatives might now be related to the presence of Kayne's null SOMETHING. In particular, on this approach the oddness of (38 a,b), might be understood in the same way that (53) is odd, whereby the speaker at once weakens and strengthens the epistemic commitment to the comparison.

(53) #A cougar is exactly something like a mountain lion.

That the presence of a null SOMETHING (38 a,b) and an overt *something* in (53) is implicated in their oddness is suggested by the fact that the same infelicity does not arise in sentences like (54) without an overt *something*.

(54) A cougar is exactly like a mountain lion.

To summarize the proposal so far, we have adopted from Kayne's (2007 fn.9) discussion of *be like*, the idea that such constructions involve a null SOMETHING indefinite on direct speech but not reported thought interpretations. This approach, together with the assumption of a deictic THAT element—null in most *be like* dialects—correctly expresses a range of idiosyncratic properties of *be like* as a quote introducer in English. On this approach, *be like* quotatives will be a species of manner deictic quotative construction which have been peripheral to the formal literature on quotatives (Munro 1982, Güldemann 2002, Blain and Déchaine 2007 and Etxepare 2010.) In particular, *be like* quotatives will be reminiscent of Vedic Sanskrit *iti* 'thus' (Hock 1982, Saxena 1995), as in (55), German *so* 'like' (56) and Plains Cree *itwê* 'thus' as in (57).[v]

(55) ***Vedic Sanskrit*** (R.V. 10115.8-9, Hock 1982: 48)[vi]
"tvām stoṣāma…" iti tvā agne ṛṣayaḥ avocan
You-ACC praise thus tva-ACC Agni-VOC sages say-AOR.3PL
'"We shall praise you…", the sages tell you, Agni.'

(56) ***German*** (Golato 2000)
Und ich so "Ja, wir glauben."
And I like yes we think-3pl
'And I was like, "Yes, we think."

(57) ***Plains Cree*** (Blain & Déchaine 2007:262)
â, namôy," itwêw,
well neg thus.3sg
'He said thus, "Well, no."

Particularly reminiscent of *be like* from the perspective of the above proposal are innovative quotative constructions in Icelandic available for some younger speakers with an overt 'something', as in (58).

(58) ***Icelandic***
Hann eitthvað, "ja".
He something yes
"He was like, 'Yes.'"

Icelandic *eitthvað*, German *so,* and other innovative quote introducers in Germanic appear to behave like English *be like* in terms of many of the properties discussed earlier in this section. In particular, Icelandic *eitthvað* and German *so* differ from other quote introducers in these languages in not introducing indirect speech and being compatible with reported thought. An obstacle to further comparison between English and German/Icelandic, is that unlike the English construction, German *so* and Icelandic *eitthvað* constructions do not involve an overt copula. This fact makes it difficult to tell whether other similarities between English and German/Icelandic including their incompatibility with wh-extraction and quote raising are attributable to properties of the quotative structure—a null indefinite, say—or are poor for reasons having to do with the absence of a main verb, V2 restrictions etc.[vii]

Other differences among these constructions concerns their morphology. Like English *like*, Vedic Sanskrit *iti* can optionally co-occur with a *say*-type verb of saying, but need not. Plains Cree *itwê-,* in contrast, is unambiguously a main verb morphologically—a verb of "thusing" in Blain & Déchaine's discussion. Space constraints preclude a more detailed discussion of these facts here. The similarity between these constructions, nevertheless, suggests a possible unified approach such that these languages will differ, among other ways, in terms of which elements may be left unpronounced.

4.3 The evolution of *be like* quotatives

As noted above, early descriptions of *be like* characterized it not as an introducer of direct speech but rather of reported thought exclusively; direct speech *be like* is reported to have emerged subsequently (Butters 1982, Tagliamonte and Hudson 1999, Buchstaller 2004). In this light, one possible analysis of the evolution of *be like* is that stative and eventive interpretations emerged independently. In particular, one possibility proposed in the diachronic literature is that stative, non-speech uses of *be like* emerged as a reanalysis of descriptions of states of individuals in sequences of *be* + focuser/discourse marker *like*+ predicate adjectives or non-lexicalised sounds as in (59) and (60) respectively (Buchstaller 2004:101-113). Direct speech uses of *be like* might then have evolved as a reanalysis of these reported thought interpretations.

(59) I was like devastated.
(60) She was like "*ugh*".

Nevertheless, in the preceding discussion, we have suggested two reasons for viewing diffusion of direct speech and reported thought guises of *be like* as involving a single abstract process of change. First, from the perspective of Kroch's constant rate hypothesis, a unified approach explains the similar age slopes in the experimental data reviewed above and much of the corpus based literature suggesting similar rates of diffusion for these two guises of *be like.* A second motivation for this approach is that it accounts for eventive interpretations of *be like* constructions in the absence of any overt material obviously responsible for the change of state interpretation. In particular, we have proposed that the eventive interpretation is produced not by an ambiguity in the meaning of *be*, but rather by a flexibility in its meaning; as shown by Rothstein (1999), the same *be* can create both eventive and stative readings. This approach entails that direct speech *be like* is produced by the grammar from the outset of albeit as a disfavoured variant, as it remains in most recent production studies (Tagliamonte and D'Arcy 2007, Buchstaller and D'Arcy 2009).

An additional issue unaddressed in the discussion so far is the learner's cue to posit a null SOMETHING in eventive contexts. We suggest that the principal cue for this is in fact approximate quote meaning; that is, that early reported thought quotes introduced by *be like* will have been readily interpretable as approximate quotes. We propose that this inferred *something like* meaning provided the cue for positing the null indefinite illustrated in (49). On this approach, a single innovation is fundamentally responsible for the emergence contemporary *be like* quotatives, namely the novel use of quotes to describe states of individuals. No further syntactic changes are required to account for the emergence of eventive "direct speech" guises of *be like* on this approach, which come for free as a consequence of a Rothsteinean "repackaging" mechanism independently motivated for "agentive" *be* contexts. The development of a null SOMETHING motivated by the pragmatics of *be like* in direct speech contexts accounts for a range of additional syntactic properties of *be like* quotatives that distinguish it from other English verbs of saying.

5. Conclusion.

Based on results from two judgement experiments and some recent spoken corpus studies, this paper proposes a diachronic syntax for *be like* quotatives in English. We propose that evidence suggesting similar rates of diffusion for eventive (direct speech) and stative (non-speech/thought) interpretations of *be like* quotatives reflect a single abstract process of change. In the spirit of Rothstein's (1999) proposal for adjectival predicates of copula *be*, we propose eventive direct speech interpretations of *be like* quotatives are derived via a repackaging mechanism akin to those that make count readings out of mass nouns in the nominal domain. A second goal of this paper is account for some exceptional syntactic properties of *be like* as a quote introducer in English. Our proposal relates *be like* to other manner deictic ('thus') quotatives cross-linguistically Blain & Déchaine (2007), Güldemann (2002). Future formal work might usefully explore the semantics of these under-studied constructions from a comparative perspective.

Acknowledgements.

We are grateful participants in our experiments. Thanks also to Maryam Bakht, Jóhannes Gísli Jónsson, George Tsoulas, Richard Kayne, Tony Kroch, and audiences at LingEvid2010 and DiGS XII. This research is supported by ESRC grant number 061-25-0033 and by supported by a grant from the Spanish Ministerio de Ciencia E Inovación (B. Fernández, PI) (FFI2008-00240/FILO).

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Endnotes:

[i] Rothstein refers to this as a "repackaging" mechanism.

[ii] For *for* adverbials vs. *force...to* as the eventive/stative comparison, p=.542; *for* adverbials vs. pseudoclefts p=.316; *for* adverbials vs. progressives p=.930; and *for* adverbials vs. imperatives, p=.317.

[iii] Readers may refer to Rothstein (1999) for detailed argumentation and formal implementations of her theory.

[iv] One question that is left unanswered here is what conditions this implicature. As far as we can see, there are two clear possibilities. The first is that it is a manner implicature, associated with the choice of the colloquial register. The second option is that it is a scalar implicature, as "say something similar to X" is weaker than "say X verbatim". This may be supported by the fact that "John did not say exactly X" seems to implicate "John said something like X"; however, investigating the existence of such a scale and where exactly *be like* belongs on it has to be left as a matter for future research.

[v] Another case may be Shona. Güldemann (2002) proposes a proto-form **-ti* 'thus', as the source of contemporary Shona *–ti*, 'say', 'think' as in (i)

(i) nda-*ti* uya neni (Güldemann 2002: 253)
1s:perf-x come:imp com:1s
'I said: "Come with me!" '

[vi] Gloss from Davison 2009: 274.

[vii] According to Blain and Dechaine (2007), Plains Cree *itwê-* is like English *be like* in that it is incompatible with direct speech and also allows reported thought readings. Unlike *be like* and like *say*, however, *itwê-* does participate in movement akin to English quotative raising.